



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/531,005	03/20/2000	Chun-Geun Choi	P56011	6332

7590 01/29/2003

Robert E Bushnell
Suite 300 1522 K Street NW
Washington, DC 20005-1202

EXAMINER

JOSEPH, THOMAS J

ART UNIT

PAPER NUMBER

2174

DATE MAILED: 01/29/2003

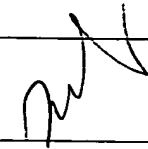
Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/531,005

Applicant(s)

CHOI ET AL. 

Examiner

Thomas J Joseph

Art Unit

2174

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 November 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1 – 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kurtenbach et al (US 6,414,700) and Foster (US 6,211,870).

Claim 1:

Kurtenbach teaches use of a GUI for operating hotkeys (col. 1, lines 35 – 55). This GUI, corresponding to hotkeys, uses a video display control apparatus having hotkeys for a user to invoke and control functions associated with the video apparatus, wherein said function is represented by a menu item from an on-screen display (OSD) menu, along with said video display control apparatus (fig. 1; col. 1, lines 35 – 55). The use of computerized hotkeys inherently teach using a memory unit coupled to the button unit, that are adapted for storing information concerning OSD menu items. Further, the said computerized hotkeys teach a button unit comprising at least of one hotkey button adapted for generating a key signal corresponding to a menu item on the OSD menu. Any button on an input device such as a keyboard or mouse acts as this key. The use of the said computerized hotkeys teaches a control unit for receiving said key signal from said button unit; for reading information concerning an OSD menu item stored in the memory unit, when said key signal is received; and for thereupon sending a control

signal to the video display apparatus to control a function thereof. Kurtenbach fails to teach an OSD unit for outputting an OSD character display signal to a video processing unit in response to a said key signal, whereby actuation by a user of said hotkey button causes a screen display of one or more OSD characters. However, Kurtenbach does suggest the need for specific personalize hotkeys by proposing a GUI containing numerous operations that are accessible with a minimum number of cursor selections (fig. 1; col. 1, lines 35 – 55).

Foster teaches an editing system wherein the user can essentially create a customized hotkey (col. 10, lines 55 – 65). This customization allows the user to actuate a personal hotkey while causing the screen to display one or more OSD characters. It would have been obvious to one with ordinary skill in the art at the time of the invention to combine the hotkey actuations disclosed by Foster with the GUI coupled with hotkeys taught by Kurtenbach. Doing so gives the user the capability to establish personalized hotkeys.

Claim 2:

Kurtenbach teaches a video display control apparatus wherein the OSD menu displays one or more OSD menu items on the screen of the video display apparatus (fig. 1).

Claim 3:

Foster teaches a method for a user to program personal hotkeys (fig. 1, #1050, #1166). Such a method is a detector for determining whether present-time information corresponds to an OSD menu item selected at a present time is identical to past-time

information corresponding to an OSD menu item and already stored in the memory unit. Further, the present-time information is not identical to said past-time information, for enabling storage of said present-time information in the memory unit.

Claim 4:

Kurtenbach fails to teach a video display control apparatus wherein said function of a video display apparatus is selected from the following group: audio mute, audio volume control, screen position, screen contrast, screen brightness, color, and tint. Foster teaches a video display control apparatus wherein said function of a video display apparatus is selected from the following group: audio mute, audio volume control, screen position, screen contrast, screen brightness, color, and tint (fig. 7). The figure provides a specific mute key. It would have been obvious to one with ordinary skill in the art at the time of the invention to combine the audio mute, audio volume control, screen position, screen contrast, screen brightness, color, or tint controller taught by Foster with the GUI coupled with hotkeys taught by Kurtenbach. Doing so gives the user the ability to customize video and audio output control keys.

Claims 5, 6, and 7:

Kurtenback and Foster teach the rationale for claims 5, 6, and 7 in rejected claim 1.

Claim 8:

Kurtenback and Foster teach the rationale for claim 8 in rejected claim 1. Foster teaches a TV system (fig. 11). The remote control system taught by Foster requires a TV system. Foster teaches OSD menu items on a display (fig. 10, #1166). These

Art Unit: 2174

display items require a memory unit adapted for storing information concerning the said OSD menu items. Foster demonstrates a means for a user to select one of said plurality of menu items (fig. 10, #1065). Foster teaches a means for generating a selection signal corresponding to one of said plurality of menu items (fig. 10, #1065).

This is a response to the user's selection. Foster teaches a control means for controlling one of said plurality of functions (fig. 11, #1050, #1161, #1162). Foster teaches associating with the TV display, a receiving means for said selection signal (fig. 10, #1166). The remote control taught by Foster requires an associated TV display for receiving the signal from the selected button. Foster teaches coupling a said receiving means for reading means for fetching and reading from the memory unit information concerning an OSD menu item stored in the memory unit wherein said selection signal is received and said information corresponds to said selection signal (fig. 10, #1166).

When the programmed button or icons is selected, a selected signal is received along with data or information corresponding with the said selected signal. Foster teaches a coupling to a means for sending a control signal to the control means, said control signal corresponding to said fetched and read information concerning an OSD menu item, whereby a function of the TV display is controlled responsively to the control signal and responsively to said information fetched and read from the memory unit concerning an OSD menu item (fig. 10, #1166). All software and selected items associated with a GUI accesses information stored in memory associated with the selected item.

Claim 9:

Foster teaches a TV system (fig. 11). The remote control system taught by Foster requires a TV system. Foster teaches the display of video data on a display screen (fig. 11). Such a display requires a video processing unit. The claim language fails to explain within the claim language the type of video processing required.

Foster teaches a means for outputting an OSD character display signal to the video processing unit in response to said selection signal (fig. 11, #1166). The buttons disclosed by Foster provide a method for controlling a video processing system in response to a user selection signal.

Foster teaches associating with the video processing unit, an actuation means for receiving said OSD character display signal and for causing responsively thereto a screen display of one or more OSD characters, said one or more OSD characters corresponding to said menu item of the OSD menu (fig. 11, #1166).

Claim 10:

Foster teaches a TV system (fig. 11). The remote control system taught by Foster requires a TV system. Foster teaches a means for determining whether a selection signal is identical to a signal stored in the memory unit and associated with information concerning an OSD menu item (fig. 11, #1166).

Foster teaches a means for executing a selected control function of the TV display in response to the selection signal if the selection signal is identical to a signal stored in the memory unit (fig. 11, #1166). When the user selects a button corresponding to a given selection, a signal identical to a signal stored in the memory unit results in executing a selected control function.

Foster teaches a means for executing a default control function of the TV display in response to the selection signal if the selection signals is not identical to a signal stored in the memory unit (fig. 11, #1166). When the user fails to select a button corresponding to a given selection, a signal not identical to a signal stored in the memory unit results in executing a default control function. A default control function includes displaying various options while awaiting selection from the user.

Response to Arguments

3. The Applicant responds to the 35 USC 103 rejections of claims 1 – 7 by amending independent claims 1, 5, and 7 then adding claims 8 – 10.

The Applicant responds to the rejection of claims 1 – 7 by amending the said claims then asserting that the Examiner fails to provide essential support of the rejection and to provide substantial evidence of record to support findings essential to support a rejection based on ordinary skill in the art. The Examiner responds by stating that it would have been obvious to one with ordinary skill in the art at the time of the invention to combine the hotkey actuations taught by Foster with the GUI coupled with hotkeys taught by Kurtenbach. Doing so gives the user the capability to establish personalized hotkeys. The Examiner asserts that customizing keys on a keyboard or GUI enables the user to customize an application according to personalized needs. This is a capability that is included with numerous software packages.

The Applicant asserts that the previous office action does not contain findings supporting existence of a specific teaching, suggestion, or motivation in the prior art of Foster and Kurtenbach. The Examiner asserts that both Foster and Kurtenbach

teaching use of buttons or program keys that enable the user to execute a function in a timesaving manner is a popular capability provided by software developers. This is a type of hotkey customization. The motivation for providing such customization empowers the user to customize buttons according to personal needs.

Conclusion

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas J Joseph whose telephone number is 703-305-3917. The examiner can normally be reached Mondays through Fridays from 7:30 am - 4:00 pm.

Art Unit: 2174

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kristine Kincaid can be reached on 703-308-0640. The fax phone numbers for the organization where this application or proceeding is assigned are 703-746-7239 for regular communications and 703-746-7238 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

Kristine Kincaid
KRISTINE KINCAID
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

tjj
January 27, 2003